

WHAT IS CLAIMED IS:

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1. An image pickup apparatus comprising:
a plurality of pixels including photoelectric
conversion means for converting an optical signal from
an object into an electrical signal and read means for
reading out the signal from said photoelectric
conversion means;

difference means for performing difference
processing on a noise component contained in the signal
read by said read means;

detection means for detecting an image pickup
condition; and

correction means for performing correction of
execution of difference processing in accordance with
an output from said detection means.

2. An apparatus according to claim 1, wherein
said detection means detects that a signal level of a
signal generated by said photoelectric conversion means
is higher than a predetermined value.

3. An apparatus according to claim 1, wherein
said detection means detects that a signal level of
noise generated in each pixel is higher than a
predetermined value.

4. An apparatus according to claim 1, wherein

said correction means controls said difference means
not to perform difference operation.

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5. An apparatus according to claim 2, wherein
said correction means controls said difference means
not to perform difference operation.

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6. An apparatus according to claim 3, wherein
said correction means controls said difference means
not to perform difference operation.

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7. An apparatus according to claim 1, wherein
said correction means replaces a signal output from
said difference means with a signal of a predetermined
signal level.

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8. An apparatus according to claim 2, wherein
said correction means replaces a signal output from
said difference means with a signal of a predetermined
signal level.

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9. An apparatus according to claim 3, wherein
said correction means replaces a signal output from
said difference means with a signal of a predetermined
signal level.

10. An image pickup apparatus comprising:

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a plurality of pixels including photoelectric conversion means for converting an optical signal from an object into an electrical signal and read means for reading out the signal from said photoelectric conversion means;

difference means for performing difference processing on a noise component contained in the signal read by said read means;

10 detection means for detecting an image pickup condition; and

correction means for controlling said difference means in accordance with an output from said detection means.

15 11. An apparatus according to claim 10, wherein said correction means inhibits execution of difference processing by said difference means in accordance with an output of said detection means.

20 12. An apparatus according to claim 10, wherein said detection means detects that a signal level of a signal generated by said photoelectric conversion means is higher than a predetermined value.

25 13. An apparatus according to claim 11, wherein said detection means detects that a signal level of a signal generated by said photoelectric conversion means

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is higher than a predetermined value.

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14. An apparatus according to claim 10, wherein
said detection means detects that a signal level of
noise generated in each pixel is higher than a
predetermined value.

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15. An apparatus according to claim 11, wherein
said detection means detects that a signal level of
noise generated in each pixel is higher than a
predetermined value.

16. An image pickup apparatus comprising:
a pixel including photoelectric conversion means
15 for converting an optical signal from an object into an
electrical signal and read means for reading out the
signal from said photoelectric conversion means;

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difference means for performing difference
operation on a noise component contained in the signal
read by said read means;

detection means for detecting a signal level of
noise generated in said pixel; and

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correction means for correcting the signal read
out by said read means in accordance with an output of
said detection means.

17. An apparatus according to claim 16, wherein

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5 said detection means detects that a signal level of a signal generated by said photoelectric conversion means is higher than a predetermined value, thereby detecting that the signal level of noise generated in each pixel is higher than a predetermined value.

10 18. An apparatus according to claim 16, wherein said correction means controls said difference means not to perform difference operation.

15 19. An apparatus according to claim 17, wherein said correction means controls said difference means not to perform difference operation.

20 20. An apparatus according to claim 16, wherein said correction means replaces a signal output from said difference means with a signal of a predetermined signal level.

25 21. An apparatus according to claim 17, wherein said correction means replaces a signal output from said difference means with a signal of a predetermined signal level.

22. An apparatus according to claim 1, wherein said read means amplifies the signal from said photoelectric conversion means, and outputs the

amplified signal.

23. An apparatus according to claim 22, wherein
said pixels include reset means for resetting an input
of amplification means.

24. An apparatus according to claim 23, wherein
said pixels include transfer means for transferring the
signal from said photoelectric conversion means to said
amplification means.

25. An apparatus according to claim 10, wherein
said read means amplifies the signal from said
photoelectric conversion means, and outputs the
amplified signal.

26. An apparatus according to claim 25, wherein
said pixels include reset means for resetting an input
of amplification means.

27. An apparatus according to claim 26, wherein
said pixels include transfer means for transferring the
signal from said photoelectric conversion means to said
amplification means.

28. An apparatus according to claim 16, wherein
said read means amplifies the signal from said

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photoelectric conversion means, and outputs the amplified signal.

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29. An apparatus according to claim 28, wherein said pixels include reset means for resetting an input of amplification means.

30. An apparatus according to claim 29, wherein said pixels include transfer means for transferring the signal from said photoelectric conversion means to said amplification means.

31. An image pickup system comprising:
said solid-state image pickup apparatus defined in claims 1 to 30;
color correction means for performing color correction on a signal output from said solid-state image pickup apparatus; and
control means for controlling said solid-state image pickup apparatus and said color correction means.

any one of ✓

32. An image pickup system comprising:
said solid-state image pickup apparatus defined in claims 1 to 30;
an LED array for irradiating said solid-state image pickup apparatus with light; and
original feeding means for feeding an original.

any one of ✓

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